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P21782.A02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Philip KORTUM et al.

Appln. No. : 10/058,785

Filed : January 30, 2002

For : SEQUENTIAL PRESENTATION OF LONG INSTRUCTIONS IN AN  
INTERACTIVE VOICE RESPONSE SYSTEM



Group Art Unit: 2645

Examiner: Ming CHOW

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner of Patents  
Washington, DC 20231

**RECEIVED**

APR 26 2004

Sir :

Technology Center 2600

In accordance with the duty of disclosure under 37 C.F.R. §1.56, §1.97-1.98 and further to the Information Disclosure Statement filed on April 29, 2002, Applicants hereby call the following documents to the Examiner's attention:

USP 4,310,727, to LAWSER, issued on January 12, 1982;

USP 4,694,483, to CHEUNG, issued on September 15, 1987;

USP 4,761,542, to KUBO et al., issued August 2, 1988;

USP 4,922,519, to DAUDELIN, issued on May 1, 1990;

USP 4,964,077 to EISEN et al., issued on October 16, 1990;

USP 5,115,501 to KERR, issued on May 19, 1992;

USP 5,204,968 to PARTHASARATHI, issued on April 20, 1993;

USP 5,206,903 to KOHLER et al., issued on April 27, 1993;

USP 5,263,167 to CONNER, Jr. et al., issued on November 16, 1993;

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USP 5,299,260 to SHAIIO, issued on March 29, 1994;

USP 5,311,422 to LOFTIN et al., issued on May 10, 1994;

USP 5,323,452 to DICKMAN et al., issued in June 21, 1994;

USP 5,327,529 to FULTS et al., issued on July 5, 1994;

USP 5,335,268, to KELLY, JR. et al., issued on August 2, 1994;

USP 5,335,269 to STEINLICHT, issued on August 2, 1994;

USP 5,388,198 to LAYMAN et al., issued on February 7, 1995;

USP 5,420,975 to BLADES et al., issued on May 30, 1995;

USP 5,479,488, to LENNIG et al., issued on December 26, 1995;

USP 5,495,567 to IIZAWA et al., issued in February 1996;

USP 5,500,795, to POWERS et al., issued on March 19, 1996;

USP 5,519,772 to AKMAN et al., issued on May 21, 1996;

USP 5,530,744, to CHARALAMBOUS et al., issued on June 25, 1996;

USP 5,533,107, to IRWIN et al., issued on July 2, 1996;

USP 5,535,321 to MASSARO et al., issued on July 9, 1996;

USP 5,537,470 to LEE, issued on July 16, 1996;

USP 5,553,119 to MCCALLISTER et al., issued in September 199609/96;

USP 5,561,711 to MULLER, issued on October 1, 1996;

USP 5,586,060 to KUNO et al., issued in December 1996;

USP 5,586,171 to MCALLISTER et al., issued in December, 1996;

USP 5,586,219, to YUFIK, issued on December 17, 1996;

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USP 5,594,791 to SZLAM et al., issued on January 14, 1997;  
USP 5,600,781 to ROOT et al., issued on February 4, 1997;  
USP 5,615,323 to ENGEL et al., issued in March 1997;  
USP 5,657,383 to GERBER et al., issued on August 12, 1997;  
USP 5,659,724 to BORGIDA et al., issued in August 1997;  
USP 5,566,291 to BOULTON et al., issued in October, 1996;  
USP 5,668,856, to NISHIMATSU et al., issued on September 16, 1997;  
USP 5,675,707, to GORIN et al., issued on October 7, 1997;  
USP 5,684,870 to MALONEY et al., issued in November 1997;  
USP 5,684,872 to FLOCKHART et al., issued on November 4, 1997;  
USP 5,710,884 to DEDRICK et al., issued on January 20, 1998;  
USP 5,727,950 to COOK et al., issued in March 1998;  
USP 5,729,600 to BALHA et al., issued on March 17, 1998;  
USP 5,734,709, to DEWITT et al., issued on March 31, 1998;  
USP 5,740,549 to REILLY et al., issued in April, 1998;  
USP 5,757,644 to JORGENSEN et al., issued on May 26, 1998;  
USP 5,758,257, to HERZ et al., issued on May 26, 1998;  
USP 5,771,276, to WOLF, issued on June 23, 1998;  
USP 5,793,368 to BEER, issued on August 11, 1998;  
USP 5,806,060 to BORGIDA et al., issued in September 1998;  
USP 5,808,908, to GHABRAMANI, issued on September 15, 1998;

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USP 5,809,282, to COOPER et al., issued on September 15, 1998;  
USP 5,812,975, to KOMORI et al., issued September 22, 1998;  
USP 5,819,221, to KONDO et al., issued on October 6, 1998;  
USP 5,821,936 to SHAFFER et al., issued in October, 1998;  
USP 5,822,744, to KESEL, issued on October 13, 1998;  
USP 5,825,856, to PORTER et al., issued on October 20, 1998;  
USP 5,825,869 to BROOKS et al., issued in October 1998;  
USP 5,832,428, to CHOW et al., issued on November 3, 1998;  
USP 5,832,430, to LLEIDA et al., issued on November 3, 1998;  
USP 5,848,396 to GERACE, issued in December 1998;  
USP 5,864,605 to KESHAV, issued in January, 1999;  
USP 5,864,844 to JAMES et al., issued on January 26, 1999;  
USP 5,870,308, to DANGELO et al., issued on February 9, 1999;  
USP 5,884,029 to BRUSH, II et al., issued in March 1999;  
USP 5,899,992 to IYER et al., issued May 4, 1999;  
USP 5,903,641 to TONISSON, issued in May 1999;  
USP 5,923,745 to HURD, issued in July 1999;  
USP 5,943,416, to GISBY, issued on August 24, 1999;  
USP 5,953,406 to LARUE et al., issued in September 1999;  
USP 5,991,735 to GERACE, issued in November 1999;  
USP 6,014,638 to BURGE et al., issued in January, 2002;

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USP 6,016,336 to HANSON, issued on January 18, 2000;  
USP 6,044,355 to CROCKETT et al., issued in March 2000;  
USP 6,055,542 to NIELSEN et al., issued on April 25, 2000;  
USP 6,058,163 to PATTISON et al., issued on May 2, 2000;  
USP 6,058,179 to SHAFFER et al., issued on May 2002, 2000;  
USP 6,061,433 to POLCYN et al., issued on May 09, 2000;  
USP 6,067,538 to ZORBA et al., issued on May 23, 2000;  
USP 6,099,320 to PAPADOPOULOS, issued on August 8, 2000;  
USP 6,128,380 to SHAFFER et al., issued on October 3, 2000;  
USP 6,134,315 to GALVIN, issued in October, 2000;  
USP 6,134,530 to BUNTING et al., issued on October 2000;  
USP 6,157,808 to HOLLINGSWORTH, issued on December 5, 2000;  
USP 6,163,607 to BOGART et al., issued on December 19, 2000;  
USP 6,166,732 to MITCHELL et al., issued on December 26, 2000;  
USP 6,173,053 to BOGART et al., issued on January 9, 2001;  
USP 6,201,948 to COOK et al., issued on March 13, 2001;  
USP 6,212,502 to BALL et al., issued in April, 2001;  
USP 6,236,955 to SUMMERS, issued on May 22, 2001;  
USP 6,236,990 to GELLER et al., issued in May, 2001;  
USP 6,269,153 to CARPENTER et al., issued in July, 2001;  
USP 6,282,404 to LINTON, issued on August 28, 2001;

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USP 6,330,326 to WHITT, issued in December 2001;

USP 6,349,290 to HOROWITZ et al., issued in February, 2002;

USP 6,353,661 to BAILEY, III, issued in March, 2002;

USP 6,389,400 to BUSHEY et al., issued on May 14, 2002;

USP 6,389,403 to DORAK, Jr. et al., issued in May, 2002;

USP 6,389,538 to GRUSE et al., issued in May, 2002;

USP 6,405,159 to BUSHEY et al., issued on June 11, 2002;

USP 6,411,687 to BOHACEK et al., issued in June, 2002;

USP 6,448,980 to KUMAR et al., issued on September 10, 2002;

USP 6,564,197 to SAHAMI et al., issued in May, 2003;

U.S. Patent Application Publication No. US 2003/0026409 to BUSHEY et al., which published on February 6, 2003;

U.S. Patent Application No. 2003/0156706 to KOEHLER et al., which published on August 21, 2003;

U. S. Patent Application No. 2002/0133394 to BUSHEY et al., which was published on September 12, 2002;

PCT Publication No. WO 00/73968 to BUSHEY et al., which was published on December 7, 2000;

PCT Application No. WO 03/013111, which was published on February 13, 2003;

United Kingdom Patent Application No. 0128396.9 to BUSHEY et al., which was filed on May 26, 2000;.

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Kelly, "From Intelligent Call Routing to Intelligent Contact Management," Call Center Solutions, v19, n3, Sep. 2000, 4 pages, from DIALOG File 15: ABI/Inform;

"Call Center Roundup (Buyers Guide)," Teleconnect, Dec. 1998, 10 pages, from DIALOG File 275: Gale Group Computer DB;

"Call Centers: sales, service and competitive advantage," Canadian Business, v70, n2, Feb. 1997, 8 pages, from DIALOG File 148: Gale Group Trade & Industry DB;

Foster, "Advanced Definity call centers: Working for you and your customers," AT&T Technology, v9, n2, Summer 1994, 7 pages, from DIALOG File 15: ABI/Inform;

Card, S.K.; Moran, T.P.; and Newell A. (1983). *The Psychology of Human-Computer Interaction*. Hillsdale, NJ: Lawrence Erlbaum;

Hart, S.G.; and Staveland, L.E. (1988). *Development of the NASA-TLX (Task Load Index): Results of Empirical and Theoretical Research*. In P.A. Hancock and N. Meshkati (Eds.), *Human Mental Workload*. (pp. 139-183) Amsterdam: North-Holland;

John, B.E.; and Kieras, D.E. (1996). Using GOMS for User Interface Design and Evaluation: Which technique? *ACM Transactions on Computer-Human Interaction*, 3 (4). 287-319;

Shingledecker, C.A. (1980). Operator Strategy: A Neglected Variable in Workload Assessment. *The American Psychological Association, Division 21 Symposium on "Mental Workload Measurement: The Theory Application Interface."* Montreal, Quebec, Canada: American Psychological Association;

Wei, Z.G. (1997). *Mental Load and Performance at Different Automation Levels*. The

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Netherlands: Delft University. Applicants particularly call the Examiner's attention to pages 28-38 of this document;

Wierwille, W.W. and Eggemeier, F.T. (1993). Recommendations for Mental Workload Measurement in a Test and Evaluation Environment. *Human Factors*, 35 (2), 263-281;

Ameritech Corp., "Ameritech Phone-Based UI Standards: Dialogue Design",  
<http://www.ameritech.com/corporate/testtown/library/standard/pbix4.html>>, 1998;

InterVoiceBrite, Inc., "AgentConnect Call Center Platform Brochure", no date available;  
"PADIS – An Automatic Telephone Switchboard and Directory Information System" by A. Kellner et al. published in Speech Communication, October 1997, together with a list of papers and publications by Andreas Kellner that appears to provide publication date information for articles by Andreas Kellner;

"Natural Language Call Routing: A Robust, Self-Organising Approach" by Bob Carpenter & Jennifer Chu-Carroll, Lucent Technologies Bell Laboratories (1998), together with a CiteSeer citation;

"Lucent Technologies announces trial of natural language call routing technology for USAA" – a press release dated December 3, 1997;

INSPEC abstract of "A Spoken Language Ssystem for Aautomated Call Routing" published 1997 IEEE International Conference on Acoustics, Speech, and Signal Processing by G. Riccardi et al., AT&T Bell Labs.

Kobayashi, K. et al., (1988) "Information Presentation based on Individual User Interests", 1998 Second International Conference on Knowledge-Based Intelligent Electronic



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Systems, 21-23 April 1998, IEEE pp. 375-383.

Sgouros, N. et al., (1997), "Dynamic Dramatization of Multimedia Story Presentations", ACM, pp. 87-94.

Murtaugh, M., (1996), "The Automatist Storytelling System," Massachusetts Institute of Technology, Masters Thesis.

Brooks, K.M., "Do Story Agents Use Rocking Chairs?" The Theory and Implementation of One Model for Computational Narrative, Processings of the Fourth ACM International Multimedia Conference on Intelligent User Interfaces, ACM Press 1996.

Maybury, M, Intelligent Multi-Media Interfaces, AAAI/MIT Press, Cambridge, MA 1993, Chapter 5: S.K. FIENER et al., "Automating the Generation of Coordinated Multimedia Explanations".

P. Szekely, "Retrospective and Challenges for Model-Based Interface Development", USC Information Sciences Institute, Marina del Ray, CA 1996.

C. Stanfill et al., "Toward Memory-Based Reasoning", Communications of the ACM, Vol. 29, No. 12, December 1986.

Orwant, J, "Doppelganger Goes to School: Machine Learning for User Modeling", MIT MS Thesis, September 1993.

Orwant, J. "For want of a bit the user was lost: Cheap user modeling", IBM Systems Journal, Vol. 35, Nos. 3 & 4, pp. 398-416, 1996.

Shardanand, U., "Social Information Filtering for Music Recommendation", MIT MS Thesis, 1994.

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Maes, P. "Behavior-Based Artificial Intelligence", MIT Media-Laboratory, From Animals to Animats 2, Proceedings of the Second International Conference on Simulation of Adaptive Behavior, 1992.

With respect to the Web sites cited herein, the date on which the site was retrieved and printed is given as the earliest date known to applicants. Applicants make no representation that this "retrieved on" date is the earliest publication. However, applicants are not aware of any practical way of determining the publication date on the World Wide Web.

Further in accordance with the duty of disclosure under 37 C.F.R. §1.56, §§1.97-1.98, Applicants hereby call the Examiner's attention to the following copending and commonly assigned patent applications:

U.S. Patent Application No. 09/532,038 to BUSHEY et al., entitled "Interface and Method of Designing an Interface", filed on March 21, 2000;

U.S. Patent Application No. 09/578,904 to BUSHEY et al., entitled "A Method for Integrating User Models to Interface Design", filed on May 26, 2000; and

U.S. Patent Application No. 09/578,723 to BUSHEY et al., entitled "A Method to Identify and Categorize Customer's Goals and Behaviors Within a Customer Service Center Environment", filed on May, 26 2000.

In accordance with 37 C.F.R. §1.98(a)(2)(iii), copies of the above-mentioned applications are attached hereto. However, the Examiner is also requested to review the file wrapper of these U.S. patent applications at the U.S. Patent and Trademark Office and the references of record, if any, cited therein.

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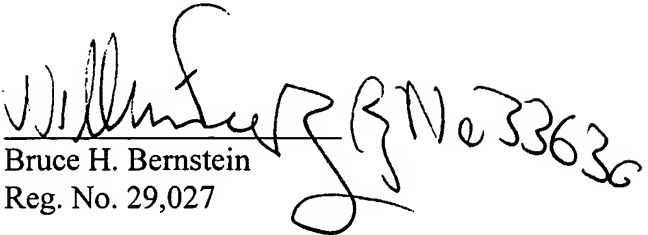
Applicants respectfully request that the Examiner consider the above materials and cite the patent documents and enclosed website printouts. Copies of the above-noted documents are attached and have been listed on a PTO-1449 Form which is also attached hereto. Accordingly, the Examiner is requested to initial the appropriate spaces on the attached PTO-1449 Form and to return a copy of the Form to Applicants with the next official communication in the present application to confirm consideration of these documents.

Applicants note that an Office Action on the Merits has not issued in the instant application, and thus no fee is believed necessary to ensure consideration of the submitted materials. However, if an Office Action on the Merits has issued, and is crossing this statement in the mail, the undersigned hereby authorizes the Commissioner to charge any fee necessary for the consideration of this statement, including any payment under 37 C.F.R. § 1.17(p), to the undersigned's Deposit Account No. 19-0089.

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Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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April 13, 2004  
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